

WHAT IS CLAIMED IS:

1. A gas flow measurement apparatus that measures flow of gas emitted from an EUV light source
5 in a light source chamber that accommodates the EUV light source, said gas flow measurement apparatus comprising an absorber that receives light emitted from the EUV light source and introduced into the gas flow measurement apparatus.

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2. A gas flow measurement apparatus according to claim 1, wherein said absorber has a speed of gas emitted per a unit area due to light emitted from the EUV light source is $1\text{E-}7$ ($\text{Pa} \cdot \text{m}^3/\text{s} \cdot \text{W} \cdot \text{cm}^2$) or smaller.

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3. A gas flow measurement apparatus according to claim 1, wherein said absorber is made of cupper or silicon.

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4. A gas flow measurement apparatus according to claim 3, wherein said absorber has a surface that has been made approximately flat by mechanical polishing or electropolishing.

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5. A gas flow measurement apparatus according to claim 1, wherein said absorber is made of single crystal silicon, and forms an optical irradiation

surface due to cracks along a cleavage plane in the crystal.

6. A gas flow measurement apparatus according to
5 claim 1, wherein said absorber includes a cooling
mechanism.

7. A gas flow measuring method that measures a
flow of gas emitted from the EUV light source using a
10 gas flow measurement apparatus that measures flow of
gas emitted from an EUV light source in a light source
chamber that accommodates the EUV light source, said
gas flow measurement apparatus comprising an absorber
that receives light emitted from the EUV light source
15 and introduced into the gas flow measurement apparatus.